

**Notice of Allowability**

Application No.

10/053,201

Examiner

PHUC T DANG

Applicant(s)

ROSENBERG ET AL.

Art Unit

2818

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Preliminary Amendment filed on August 29, 2003.
2. ☒ The allowed claim(s) is/are 31-53 (renumbered as in new claims 1-23).
3. ☒ The drawings filed on 15 January 2002 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
  - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No. \_\_\_\_\_.
  - (b) ☐ including changes required by the proposed drawing correction filed \_\_\_\_\_, which has been approved by the Examiner.
  - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet.

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |   |
|---|---|
| 1 <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                  | 2 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)          |
| 3 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                         | 4 <input type="checkbox"/> Interview Summary (PTO-413), Paper No. _____             |
| 5 <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449), Paper No. <u>0803</u> . | 6 <input type="checkbox"/> Examiner's Amendment/Comment                             |
| 7 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material      | 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
|   | 9 <input type="checkbox"/> Other  |

PHUC T. DANG <sup>PD</sup>  
PRIMARY EXAMINER

*[Signature]*

Art Unit: 2818

## **DETAILED ACTION**

### **Examiner's Statement of Reasons for Allowance**

1. Claims 31-53 are allowed.

Claims 31-53 are renumbered as in new claims 1-23.

2. The following is an examiner's statement of reasons for allowance:

Claims 31-32 are allowable over the prior art for at least the reason that the prior art of record, taken alone or in combination, fails to teach or reasonably suggests a layer comprising high purity tantalum, less than about 500 ppm, by weight, total metallic impurities, and less than about 50 ppm, by weight, tungsten or molybdenum.

Claims 33-34 are allowable over the prior art for at least the reason that the prior art of record, taken alone or in combination, fails to teach or reasonably suggests a capacitor comprising high purity tantalum comprising tantalum, less than about 500 ppm, by weight, total metallic impurities, and less than about 50 ppm, by weight, tungsten or molybdenum.

Claims 35-39, 42, 45-46 and 51 are allowable over the prior art for at least the reason that the prior art of record, taken alone or in combination, fails to teach or reasonably suggests a sputtering target blank comprising tantalum, less than about 500 ppm by weight (ppmw) total metallic impurities, less than or equal to 50 ppmw molybdenum or tungsten, and less than about 100 ppmw oxygen.

Claims 40, 43, 47-48 and 52 are allowable over the prior art for at least the reason that the prior art of record, taken alone or in combination, fails to teach or reasonably suggests a sputtering target blank comprising tantalum, less than 500 ppmw total metallic impurities, less

Art Unit: 2818

than 5 ppmw total of molybdenum or tungsten, less than about 100 ppmw oxygen, and less than or equal to 10 ppbw each of uranium and thorium.

Claims 41, 44, 49-50 and 53 are allowable over the prior art for at least the reason that the prior art of record, taken alone or in combination, fails to teach or reasonably suggests a sputtering target blank comprising tantalum, less than 500 ppm by weight (ppmw) total metallic impurities, less than 2 ppmw total of molybdenum or tungsten, and less than 25 ppmw oxygen.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuc T. Dang whose telephone number is (571) 272-1776. The examiner can normally be reached on 8:00 am-5:00 pm.

4. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David C. Nelms can be reached on 703-308-4910. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-872-9306 for After Final communications.

5. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Phuc T. Dang

PD



Primary Examiner

Art Unit 2818

January 30, 2004